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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,947	09/26/2001	James Chi-Shun Tsiao	490.11	3725

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EXAMINER
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SKED, MATTHEW J

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/964,947	TSIAO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Matthew J. Sked	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7-10,12 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5, 7-10, 12 and 26-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s).

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The rejection under 35 USC 112 is withdrawn in view of the amendment filed 5/24/06.
2. Applicant's arguments with respect to claims 1, 2, 4, 5, 7-10, 12 and 26-28 have been considered but are moot in view of the new ground(s) of rejection, necessitated by amendment.
3. In addition, Applicant requests the provisional applications 60/228,616 and 60/191,883 of the Pustejovsky reference be made available to the Applicant. The Examiner asserts that the information cited in the rejection is all contained in the provisional application 60/228,616. However, due to the confidentiality of patent application information these materials cannot be made available to the Applicant without a written request and payment of the appropriate fees (see 37 CFR 1.14 (a)(1)(v)).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 4, 5, 7-10, 12 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surace et al. (U.S. Pat. 6,144,938) in view of Pustejovsky et al. (U.S. Pat Pub. 2001/0037328A1), cited in the previous Office Action.

As per claims 1, 5 and 12, Surace teaches a handheld personal assistant operated by a user comprising:

a categorizer configured to store a plurality of data items in a database organized by categories of information that are grouped into a calendar category, an address book category and a to-do-list category wherein each category of information includes one or more subcategories of information that are linked in a hierarchical structure (PDA allows the set up of a calendar, to-do lists and an address book, col. 16, lines 1-29 and Fig. 18);

a voice-recognizer configured to recognize the user's voice and transform an expression input by the user into a different mode of information (recognizer, col. 12, lines 42-65);

a context processor configured to determine the category of information corresponding to the expression input by the user, based on one of a direct context specified by the user or an inferred context based on the expression input and maintain the storage of the data items by the categorizer in the determined category of information until a new category of information is determined (select domain state that allows the user to choose the domain of functionality and once in this state the user remains in this state until another domain state is determined, col. 22, line 61 to col. 23, line 12); and

a natural-language processor configured to process the mode of information to extract from the database a piece of information (recognition grammar is used to recognize phrases dependent on the user's interactions hence the domain, col. 8, lines 8-23 and col. 13, lines 24-38).

Surace does not teach wherein if there is ambiguity with the mode of information to extract from a first category of information, the natural-language processor provides a first response to the user having a plurality of options; the natural-language processor then provides a second response based upon the user's selection from the options.

Pustejovsky teaches wherein if there is ambiguity with the mode of information to extract from a first category of information, the natural-language processor provides a first response to the user having a plurality of options, the natural-language processor then provides a second response based upon the user's selection from the options (ambiguous queries cause the user to be prompted to indicate the category to use for the query, paragraph 44).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Surace wherein if there is ambiguity with the mode of information to extract from a first category of information, the natural-language processor provides a first response to the user having a plurality of options, the natural-language processor then provides a second response based upon the user's selection from the options as taught by Pustejovsky because it ensures queries are correct prior to searching hence removing redundancy.

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6. As per claim 2, Surace teaches wherein the processor analyzes the expression grammatically and semantically to transform at least part of the expression into at least one instruction (natural language understanding analyzes language both grammatically and semantically, col. 8, lines 8-23 and col. 13, lines 24-38).

7. As per claim 4, Surace teaches wherein the personal assistant only allows the user to access the piece of information that is personal to the user if the natural-language processor recognizes the user's voice (login with a password suggests only allowing the user to access the appropriate information, col. 22, lines 50-60).

8. As per claim 7, Surace teaches wherein said personal assistant further includes a display to display the piece of information (computer system (PDA) includes a display, col. 3, lines 38-50 and col. 16, lines 1-29).

9. As per claim 8, Surace teaches wherein said personal assistant further includes a voice synthesizer that transforms the piece of information into sound to communicate to the person (col. 12, line 66 to col. 13, line 20).

10. As per claim 9, Surace teaches wherein the piece of information was entered into the assistant by the user (user updates and stores the stored information, col. 22, line 61 to col. 23, line 12), and wherein the personal assistant further includes a formatting process that transforms the expression input by the user into a question with one or more phrase corresponding to the one or more categories of information, and a transformation process that converts the question into an instruction comprising a query to the database (retrieves information hence queried, col. 22, line 61 to col. 23, line 12).

11. As per claim 10, Surace teaches wherein the pieces of information are entered through voice (voice user interface, col. 22, line 61 to col. 23, line 12).

12. As per claim 26, Surace teaches a method for obtaining information for a requestor interacting with a handheld computing device, said method comprising:

storing a plurality of data items in a database organized by of information that are grouped into a calendar category, an address book category, and a to-do-list category wherein each category of information includes one or more subcategories of information that are linked together in a hierarchical structure (PDA allows the set up of a calendar, to-do lists and an address book, col. 16, lines 1-29 and Fig. 18);

receiving an input voice expression from the requestor and converting the input voice expression into a text string (voice user interface receives voice through a microphone, col. 3, lines 52-61);

converting the input voice expression into a text string (recognizer extracts the speech from the input signal, col. 12, lines 42-65)

processing the text string using grammatical and semantic processing to determine a natural language meaning for the text string (uses a natural language processor with grammar to determine the user's intention, col. 8, lines 8-23, col. 12, lines 42-65 and col. 13, lines 24-38);

determining a category of information corresponding to the input by the requestor based on one of a direct context specified by the requestor or an inferred context based on the expression input (select domain state allows the user to choose the domain of functionality, col. 22, line 61 to col. 23, line 12);

extracting a piece of information from the determined category of information based upon the input voice expression (retrieves information, col. 22, line 61 to col. 23, line 12); and

maintaining the storing of the data items and the extracting of the piece of information in the determined category of information until a new category of information is determined (select domain state allows the user to choose the domain of functionality and once in this state the user remains in this state until another domain state is determined, col. 22, line 61 to col. 23, line 12).

Surace does not teach wherein if there is ambiguity with the mode of information to extract from a first category of information, the natural-language processor provides a first response to the user having a plurality of options, the natural-language processor then provides a second response based upon the user's selection from the options.

Pustejovsky teaches wherein if there is ambiguity with the mode of information to extract from a first category of information, the natural-language processor provides a first response to the user having a plurality of options, the natural-language processor then provides a second response based upon the user's selection from the options (ambiguous queries cause the user to be prompted to indicate the category to use for the query, paragraph 44).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Surace wherein if there is ambiguity with the mode of information to extract from a first category of information, the natural-language processor provides a first response to the user having a plurality of options, the natural-



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language processor then provides a second response based upon the user's selection from the options as taught by Pustejovsky because it ensures queries are correct prior to searching hence removing redundancy.

13. As per claim 27, Surace teaches wherein the piece of information was entered into the assistant by the user (user updates and stores the stored information, col. 22, line 61 to col. 23, line 12), and wherein the personal assistant further includes a formatting process that transforms the expression input by the user into a question with one or more phrase corresponding to the one or more categories of information, and a transformation process that converts the question into an instruction comprising a query to the database (retrieves information hence queried, col. 22, line 61 to col. 23, line 12).

14. As per claim 28, Surace teaches presenting the retrieved information to the requestor (outputs responses to the user, col. 12, line 66 to col. 13, line 20).

### ***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Luciw (U.S. Pat. 5,625,814) teaches a system for navigating through a personal assistant through speech recognition and natural language processing.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Sked whose telephone number is (571) 272-7627. The examiner can normally be reached on Mon-Fri (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MS  
7/25/06

  
**DAVID HUDSPETH**  
**SUPERVISORY PATENT EXAMINER**  
TECHNICAL